

Accordingly, claims 73-75, 77, 78, 80-84, 87-89, 91, 92, 94-102, 104-106, 108, 109, 111-118, 121-123, 125, 126, 128-134, 136-138, 140, 141, 143-191, 193-198, 200-207, 209-217, 219-225 and 227-246 are presently being prosecuted in this case. Applicants' amendments do not raise the issue of new matter.

I. The Rejections

Claims 71, 80-85, 90, 94-102, 111-119, 128-134 and 143-191 stand rejected under 35 U.S.C. § 102(a), as allegedly being fully met by Japanese KoKai 56-2336 and Japanese KoKai 55-160,044.

Claims 71, 80-85, 90, 94-102, 111-119, 128-134 and 143-148 stand rejected under 35 U.S.C. § 102(b) as allegedly being fully met by Bresser et al. (984).

Claims 149, 156, 163-166, 172-176, 183, 184 and 191 stand rejected under 35 U.S.C. § 102(a) as allegedly being fully met by Kugele et al. (114).

II. Claims 73-75, 77, 78, 80-84, 87-89, 91, 92, 94-101, 121-123, 125, 126, 128-133 and 234-236

Applicants first note that independent claims 71, 85 and 119 have now been rewritten in Jepson format as claims 234-236, respectively, to more particularly point and distinctly claim that which Applicants consider to be their invention. By rewriting the claims in this manner, Applicants wish to emphasize that the novelty of the present invention lies in the discovery that improved results are obtained for stabilizing compositions, having conventional organotin compounds therein, by adding to such compositions mercapto alkanol esters of monocarboxylic acids. As discussed in previous communications, the particular composition of the organotin compound used in the stabilizing composition is

not of critical importance in the present invention. Indeed, the critical aspect of the present invention is Applicants' discovery that a combination of a mercapto alkanol ester of a monocarboxylic acid with conventional organotin stabilizers results in stabilizing compositions having enhanced utility.

It is particularly noted that the claims originally presented in both U.S. Patent Application Serial No. 06/070,503 and French Application No. 78 24863, upon which this application claims priority under 35 U.S.C. §§ 120 and 119, respectively, contained similar Jepson-type claims. That the claims were originally presented in such a Jepson-type format emphasizes and supports Applicants' position that the novelty of the invention lies in the combination of mercapto alkanol esters of monocarboxylic acids with conventional organotin stabilizers, and not in the use of any particular organotin compounds per se.

Indeed, because the preamble of a Jepson-type claim is traditionally held as an implied admission of the prior art,^{1/} Applicants did not believe it was necessary at the time of the original application to set forth with particularity that which was considered to be conventional in the art of organotin stabilizers. Applicants fully envisioned that they were entitled to a broad definition of the old and well-known organotin compounds, given that such organotins represented an old, well-known, art-recognized class of materials.

^{1/} See Pentec v. Graphic Controls, 227 U.S.P.Q. 766, 770 (Fed. Cir. 1985), In re Aldrich, 158 U.S.P.Q. 311, 312 (C.C.P.A. 1968), 37 C.F.R. § 1.75(e).

Applicants acknowledge the Examiner's repeated reliance upon the 1987 Board of Patent Appeals and Interferences (Ex. A)^{2/} decision in which the Board discussed Applicants' right to claim priority under 35 U.S.C. § 120. Applicants respectfully submit, however, that the Examiner has misapplied the Board's holding by expanding the scope of the decision.

The Examiner's attention is particularly directed to page 4 of the decision wherein the Board discussed the claims that were on appeal at that time. The Board stated that U.S. Patent Application Serial No. 06/254,313 had enlarged the scope of the mono- and diorganotin derivatives set forth in the originally filed U.S. Patent Application Serial No. 06/070,503, in that it **specifically claimed** tin derivatives in which the remaining valences were satisfied by halogen and phosphorous, as well as by the removal of the hydrogen atom from the oxygen atom of a carboxylic acid, an alcohol or toluol and by the removal of the hydrogen atom from the sulfur atom of the mercaptan, mercapto alcohol, mercapto acid or mercapto alcohol ester. The Board then concluded that Applicants were not entitled to the benefit of the filing date of 06/070,503 "for the **instant claims** on appeal," because they defined "subject matter not disclosed in the parent case." (Emphasis added).

Applicants respectfully submit that the Board merely held that Applicants were not entitled to the benefit of the filing date of the originally filed U.S. application for subject matter

^{2/} For ease of the Examiner, certain previous documents from the prosecution history of this application are being provided to the Examiner in the attached exhibit book.

directed to the use of tin derivatives lacking at least one sulfur bonded to tin component. Namely, the Board did not find support in the original application for claims specifically reciting the use of tin derivatives in which the remaining valences were satisfied by the bonds set forth in the appealed claims (as set forth in the previous paragraph), in the absence of at least one sulfur bonded to tin component.

Clearly, the Board did not hold, as interpreted by the Examiner, that Applicants' claimed invention should be limited to only those organotin compounds specifically disclosed in the French and originally filed U.S. applications. Indeed, the Board noted at page 3 of the decision that the original U.S. application had disclosed the generic use of mono- and diorgano derivatives of tetravalent tin with or without sulfur. The Board went on to point out particular examples found in the original application which supported Applicants' generic disclosure of organotin compounds having at least one sulfur bonded to tin component therein.

Both the French application (See Ex. B for an English translation thereof) and the originally filed U.S. application (Ex. C) specifically identify at page 1, paragraph 1, that organotins are the class of compounds of primary interest in the disclosed invention. In discussing the background of vinyl halide stabilization at page 1, paragraph 2, both applications refer to conventional organotin stabilizing compounds as being those containing both tin and sulfur. At page 6, paragraph 3, each application states in pertinent part:

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It is remarkable that these results can be obtained as well with mono- or di- organic tin derivatives, with salts of tin not containing sulfur and with those which also contain the latter with their mixtures.

Applicants respectfully submit that the above noted disclosures expressly teach that mono- and diorganotins containing sulfur atoms were contemplated as having use in the present invention. The examples contained in the specifications of each of the applications reinforce and support this teaching by demonstrating the use of compounds in which at least one sulfur atom is bonded to tin, as would have been the case in the conventionally known stabilizers at the time the French application was filed.

For instance, Example 3 adds a mercapto alkanol ester to the conventional di-n-octyltin bis-(isooctyl mercapto acetate), and Example 8 uses the butyltin counterpart di-n-butyltin bis-(isooctyl mercapto acetate). Example 7 uses a mixture of an anhydride of thiobutyl stannic acid with di-n-butyltin bis-(isodecyl mercapto acetate); and several examples, for example, Example 4, illustrate the use of a condensation polymer of butyl stannic acid and butyl thiostannic acid.

The various aspects of the U.S. and French applications noted above clearly support claims in which the stabilizer composition includes a mercapto alkanol ester in combination with

a mono- or diorganotin compound wherein at least one atom bonded to tin is sulfur

For the foregoing reasons, Applicants respectfully submit that Applicants are entitled to the benefit of the filing dates of both the originally filed U.S. application and the French

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application under 35 U.S.C. §§ 120 and 119, respectively, for the subject matter set forth in new claims 234-236 which specifically require the use of a mono- or diorganotin compound wherein at least one atom bonded to tin is sulfur. Accordingly, because Applicants have successfully antedated the references cited against the pending claims, withdrawal of the standing rejections as they pertain to claims 73-75, 77, 78, 80-84, 87-89, 91, 92, 94-101, 121-123, 125, 126, 128-133 and 234-236 is hereby requested.

III. Claims 102-118 and 134-148

At page 4, paragraph 18, of the last Office Action, the Examiner indicated that claims 104-106, 108, 109, 136-138, 140 and 141 were directed to allowable subject matter. Applicants are therefore confused by the Examiner's refusal to withdraw the rejections currently pending against independent claims 102 and 134.

Claim 102 presently includes the limitations set forth in dependent claims 104, 105, 106 and 108. Similarly, claim 134 now includes the limitations set forth in dependent claims 136, 137, 138 and 140. Applicants thus submit that independent claims 102 and 134 are presently directed to allowable subject matter, given that claims 102 and 134 are limited to the particular embodiments provided for by the dependent claims recited above as being directed to allowable subject matter.

For the foregoing reasons, and since none of the cited references, either alone or in combination, teach or suggest the claimed invention set forth in claims 102 and 134, Applicants respectfully submit that the standing rejections under 35 U.S.C.

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§ 102(a) and (b) are improper as they pertain to claims 102 and 134 and should be withdrawn. Furthermore, claims 104-106, 108, 109, 111-118, 136-138, 140, 141 and 143-148, which depend from the cited claims, are similarly patentable over the prior art.

IV. Claims 149-191

Applicants gratefully acknowledge that the Examiner has now withdrawn Bresser et al. as a reference against the pending claims.

As to the additional rejections remaining against these claims, Applicants respectfully submit that the Examiner has misapplied the Board's holding (Ex. A) in the decision dated July 25, 1987. As stated in Applicants' last Amendment, the Board stated at page 6 of its decision that, in order to effectively antedate references, applicants must show priority with respect to (1) only so much of the **claimed** invention as the references disclose, In re Stempel, 241 F.2d 755, 113 USPQ 77 (C.C.P.A. 1957), or (2) only so much as to render the **claimed** invention obvious. In re Spiller, 500 F.2d 1170, 182 USPQ 614 (CCPA 1971).^{3/}

It its decision, the Board was analyzing cancelled claims 59-62 and 64-69, which specifically recited the organotin component as being a mono- or diorgano- derivative of tetravalent tin wherein the remaining valences of the tin atom were satisfied by bonds to halogen, oxygen, phosphorous, sulfur and a residue

^{3/} Applicants note, as recognized by the C.A.F.C., that the showing required to antedate prior art references under section 119 differs from that required under Rule 1.131. See In re Gostelli, 872 F.2d 1008, 1011, 10 U.S.P.Q.2d 1614, 1617 (Fed. Cir. 1989), which discussed the Stempel case.

resulting from i) the removal of the hydrogen atom from the oxygen atom of a carboxylic acid, an alcohol or a polyol or ii) removal of the hydrogen from the sulfur atom of a mercaptan, mercaptoacid, mercaptoalcohol, mercaptoacid ester or mercaptoalcohol ester.

The Board noted that the affidavit evidence presented failed to show reduction to practice of the use of tin derivatives wherein the remaining valences of the tin atom were satisfied by bonds to oxygen, phosphorous, or a residue resulting from i) the removal of the hydrogen atom from the oxygen atom of a carboxylic acid, an alcohol or a polyol or ii) removal of the hydrogen from the sulfur atom of a mercaptan, mercaptoacid, mercaptoalcohol, mercaptoacid ester or mercaptoalcohol ester. The Board thus took the position that the Japanese KoKai references showed more of the **claimed** compound than the affidavit evidence presented, and thus, the affidavit evidence failed to antedate the cited references.

Applicants respectfully submit that the Board merely held that Applicants had not properly shown prior reduction to practice of the claimed subject matter directed to the use of tin derivatives lacking at least one sulfur or halogen bonded to tin component. Namely, the Board did not find support in the affidavit evidence presented for claims specifically reciting the use of tin derivatives in which the remaining valences were satisfied by the bonds set forth in the previous paragraph, in the absence of at least one sulfur or halogen bonded to tin component.

Clearly, the Board did not hold, as interpreted by the Examiner, that Applicants had only antedated the cited references for subject matter wherein the tin derivatives were specifically

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limited to those compounds wherein the remaining valences were satisfied only by bonds to either a halogen or sulfur, to the exclusion of all other bonds. Indeed, the Board merely indicated that, in the absence of additional affidavit evidence, Applicants had not adequately antedated those embodiments of the **then claimed invention** lacking at least one sulfur or halogen bonded to tin component.

Applicants respectfully submit that, because claims 149-191 now specifically recite that the organotin compound is a mono- or diorganotin compound wherein at least one atom bounded to tin is a halogen, the previously submitted declarations (Ex. D) by Messrs. Foure, Mendelsohn, Chenard, Rakita and Larkin do properly document that the **claimed invention** was reduced to practice prior to December 12, 1980. Contrary to the Examiner's assertions, the Board did not dispute this showing.

Applying the Board's analysis, as discussed in Applicants' last Amendment, the affidavit evidence previously submitted does effectively remove the cited references as concerning claims 149-191, since the experiments conducted by Mr. Foure are clearly commensurate in scope with that which the cited references show of the now **claimed invention**.

Applicants respectfully submit that claims 149-191 are entitled to a date of invention prior to December 12, 1980 for the foregoing reasons. Accordingly, withdrawal of the standing rejections based upon Japanese KoKai 56-2336, Japanese KoKai 55-160,044 and Kugele '114 is hereby requested.

V. Claims 193-198, 200-217, 219-225, 237, 239, 241, 243 and 245

Applicants gratefully acknowledge the Examiner's indication in the last Office Action that claims 192-233 are directed to allowable subject matter. Accordingly, Applicants have rewritten independent claims 192, 199, 208, 218 and 226 as new claims 237, 239, 241, 243 and 245 to more particularly define the proper scope of Applicants' invention. For the reasons set forth below, Applicants respectfully submit that these new claims are also directed to allowable subject matter.

Allowed independent claims 192, 199, 208, 218 and 226 recited the use of a mono- or di- organotin compound selected from the group consisting of di-n-octyltin bis-(isooctyl mercapto acetate); di-n-butyltin bis-(isooctyl mercapto acetate); a mixture of an anhydride of thiobutyl stannic acid with di-n-butyltin bis-(isodecyl mercapto acetate); and a condensation polymer of butyl stannic acid and butyl thiostannic acid. As discussed previously, these claimed organotin compounds were specifically disclosed in both the French and the originally filed U.S. applications.

Applicants have now cancelled allowed claims 192, 199, 208, 218 and 226, and introduced in their place new claims 237, 239, 241, 243 and 245, which generically recite the use of a mono- or dialkyl bis(isooctyl mercapto acetate) compound wherein the alkyl is a C₁-C₈ alkyl. Applicants respectfully submit that the di-n-octyltin bis-(isooctyl mercapto acetate) and di-n-butyltin bis-(isooctyl mercapto acetate) compounds disclosed in both the French and the originally filed U.S. applications are representative species of the genus of compounds known as mono- or dialkyl bis(isooctyl mercapto acetate) compounds wherein the alkyl is a

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C₁-C₈ alkyl. Clearly, the specifically disclosed octyltin and butyltin species provide support for the the genus now claimed directed to C₁-C₈ alkyl organotin compounds.

Applicants further maintain, for the same reasons as set forth in Part II above, that the claimed invention should not be limited to the use of only those organotin compounds specifically disclosed in the French and originally filed U.S. applications, and that Applicants are in fact entitled to the benefit of the filing dates of both the French and the originally filed U.S. applications for that subject matter directed to the use of mono- or diorganotin compounds wherein at least one atom bonded to tin is sulfur. Clearly, if Applicants are entitled to the above noted subject matter, Applicants are also entitled to the benefit of the discussed filing dates for that subject matter directed to the use of mono- or dialkyl bis(isooctyl mercapto acetate) compounds wherein the alkyl is a C₁-C₈ alkyl.

Accordingly, Applicants respectfully request the allowance of claims 193-198, 200-217, 219-225, 237, 239, 241, 243 and 245.

CONCLUSION

In view of the foregoing remarks, the rejections under 35 U.S.C. § 102 have either been overcome or are improper and should be withdrawn. Accordingly this case is in condition for allowance and a Notice of Allowability covering claims 73-75, 77, 78, 80-84, 87-89, 91, 92, 94-102, 104-106, 108, 109, 111-118, 121-123, 125, 126, 128-134, 136-138, 140, 141, 143-191, 193-198, 200-207, 209-217, 219-225 and 227-246 is hereby requested.

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If there are any fees due in connection with the filing of this Preliminary Amendment, please charge such fees to our Deposit Account No. 06-916. If a fee is required for an extension of time under 37 C.F.R. § 1.136, such extension is hereby requested, and the requisite fee should also be charged to our Deposit Account.

Respectfully submitted,

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By


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Date: April 17, 1991

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